

PENGARUH PENAMBAHAN MOLASSES TERHADAP KUALITAS SILASE RUMPUT RUZI (*Brachiaria ruziziensis* cv. Kennedy)

Arfan Amru Jihad
15/383727/PT/07000

INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan level molases pada pembuatan silase rumput ruzi (*Brachiaria ruziziensis* cv Kennedy) terhadap kualitas fisik, pH, kandungan bahan kering (BK) dan bahan organik (BO). Rumput ruzi dipotong umur 50 hari, dicacah dengan panjang 5 hingga 10 cm untuk dibuat silase yang diperam dengan silo plastik selama 21 hari. Penelitian ini menggunakan rancangan acak lengkap pola searah, dengan faktor penambahan level molases (0%, 5%, dan 10%), masing-masing perlakuan dilakukan 5 replikasi. Hasil penelitian dianalisis anova, dan beda antar rata-rata dilakukan dengan uji Duncan's multiple range test (DMRT). Uji kualitas fisik silase menunjukkan bahwa perbedaan penambahan level molases berpengaruh nyata ($P < 0,05$) terhadap perubahan warna silase. Uji kualitas kimia menunjukkan bahwa perbedaan penambahan level molases berpengaruh nyata ($P < 0,05$) terhadap pH dan BK. Penambahan molases 10% (4.57 ± 0.53) dan 5% (4.72 ± 0.52) memiliki pH lebih rendah ($P < 0,05$) dibandingkan silase ruzi tanpa penambahan molasses (4.97 ± 0.55). BK silase ruzi dengan level penambahan molases 10% (17.52 ± 0.24) dengan level pemberian molases 5% (17.66 ± 0.43) memiliki BK lebih tinggi dibandingkan silase ruzi tanpa penambahan molasses (16.74 ± 0.42). Penambahan level molases 10% dan 5% pada pembuatan silase ruzi mampu menurunkan pH, serta meningkatkan kandungan bahan kering.

Kata kunci : Kimia, kualitas fisik, molases, rumput ruzi dan silase

THE EFFECT OF MOLASSES ADDITION ON THE QUALITY OF RUZI GRASS (*Brachiaria ruziziensis* cv. Kennedy) SILAGE

Arfan Amru Jihad
15/383727/PT/07000

ABSTRACT

This study aimed to determine the effect of molasses addition level on ruzi grass (*Brachiaria ruziziensis* cv Kennedy) silage on physical quality, pH, dry matter (DM) and organic matter (OM) contents. Ruzi grass was cut at the age of 50 days, chopped with a length of 5 to 10 cm to make silage which was ensiled in a plastic silo for 21 days. This study used a completely randomized design, with different additional levels of molasses (0%, 5%, and 10%) as treatments, which each treatment consisted of 5 replications. The results of the study were analyzed by ANOVA, and the difference between the averages was carried out using Duncan's multiple range test (DMRT). The silage physical quality test showed that the difference in the addition of molasses levels had a effect on the silage color change. Chemical quality test showed that the difference in the addition of molasses level had a significant effect ($P < 0.05$) on pH and DM. The addition of 10% (4.57 ± 0.53) and 5% (4.72 ± 0.52) molasses had a lower pH ($P < 0.05$) than the ruzi silage without the addition of molasses (4.97 ± 0.55). The addition of 10% molasses (17.52 ± 0.24) and 5% molasses (17.66 ± 0.43) had a higher DM compared to without the addition of molasses (16.74 ± 0.42). The addition of 10% and 5% molasses level in the manufacture of ruzi silage was able to lower the pH and increase the dry matter content.

Keywords: Chemistry, physical quality, molasses, ruzi grass and silage